

The Heterodyne

Newsletter of the West Valley Amateur Radio Association

April Meeting

“Low Band DX Antennas: The Good, the Bad, and the Ugly”
by Jim Peterson, K6EI

Wednesday April 9
Meeting Starts at 7pm

Meeting Location:
American Red Cross
Silicon Valley Chapter
2731 N. First Street at Plumeria Dr
(southwest corner) in San Jose
Map at www.wvara.org/meetings.html

WVARA Repeaters (W6PIY)		
Band	Frequency	PL
6 Meters	52.580- MHz	151.4 Hz
2 Meters	147.39+ MHz	151.4 Hz
1.25 Meters	223.96- MHz	156.7 Hz
0.70 Meter	441.35+ MHz	88.5 Hz
0.23 Meter	1286.2- MHz	100 Hz

Club Net

WVARA's club net is on the W6PIY repeaters each Tuesday at 8:30 pm. All repeaters are linked together during the net. The net script can be found at www.wvara.org/net.html.

Visitors Are Welcome!

President's Letter

Ham Radio is an Incredibly Big Tent. Just within the West Valley Amateur Radio Association, we have people whose interests range from using high power to break through DX pileups to those who are interested in the most miles per watt. We have people who build their own gear and those who buy a complete station. We have people whose prime interest is VHF and above and those who thrill to make contacts on 160 meters. We have people whose primary interest is emergency communications and those who are primarily interested in rag chewing on the local repeaters. We have CW enthusiasts, digital people, and those who mostly use SSB, contesters, DXers, etc.

With all these and more possibilities, why not try something new. If you are a new ham try checking into the various nets. WVARA has a net every Tuesday at 8:30PM local time on the W6PIY repeater. You can in to the 9AM talk net <9amtalk.net>. It is a bay area institution, having been running every weekday for over 25 years and very friendly to new operators. Operating as part of a ham net is a great way to practice what is needed for emergency services.



If you spend a lot of time on the local repeaters, consider learning a bit about operations in the High Frequency (HF) bands. Everyone can use SSB on 10 meters. It is a good place to start.

If you haven't tried DX, try contacting the W1AW portable stations. They move to different states every week and the operation and exchange is very much like working DX, with much stronger signals. You will find yourself working split receive and transmit frequencies some of the time.

If you haven't tried contesting, try one of the state QSO parties. I found myself making a few contacts in the Vermont QSO party and it appears that I have the highest score for west of the Rockies, which is not an officially recognized category.

If you haven't tried electronics construction, plan on coming to our June meeting where we will build a simple kit. Sometimes simple projects can make your station operation so much smoother.

For me, I like building things. I use kit radios. I built antennas, and the antennas at the house are in a constant state of flux. The latest project is trying to get passably good enough with CW so as to not make a complete fool of myself and be able to enjoy a new facet of ham radio.

73, Bill - AE6JV

About the Presentation

Low Band DX Antennas: The Good, the Bad, and the Ugly

The sunspots are currently doing great, but it won't be too many months before the long dark years of low sunspots will be back. What can be done to improve your station's DX performance on the low HF bands?

Jim Peterson, K6EI, is this month's speaker. The theme of this month's WVARA presentation will be "Low Band DX Antennas: The Good, the Bad, and the Ugly". During this presentation, we will debunk several commonly heard myths about Low Band antennas:

Myth 1) Directivity and gain are the same thing

Myth 2) A monoband yagi on a 60-foot tower is good enough, regardless of the band

Myth 3) Low Band DX antennas must be huge

We will then learn about a cheap, effective, directional antenna for 40 meters that Jim designed a decade ago: the Half Square Yagi. Jim subsequently published this design in the ARRL Antenna Compendium and presented a paper on it at an IEEE Antenna Symposium — so it must be good! I think you'll enjoy hearing about it — and maybe even consider constructing one of your own.

The meeting is this Wednesday, April 9, and will begin at 7pm. Visitors are welcome.

Meeting Location: Silicon Valley Chapter of the American Red Cross, 2731 N. First Street at Plumeria Drive (southwest corner) in San Jose.

If you haven't been to the Red Cross, "talk-in" is usually available on the Association's repeaters. Best choice would be 2m/220.

And for those who are hungry, several of us will be eating dinner prior to the meeting. This month we'll be meeting for Chinese food at Ume (2595 North First Street, at the corner of W Trimble and First St.) at 6:00pm. (Note: our old dinner location, Carl's Jr, has closed.)

Hope to see you there!

Jim Peterson, K6EI

Vice President and member of the WVARA Speaker Selection Committee

The QRPKits Battery Status Indicator

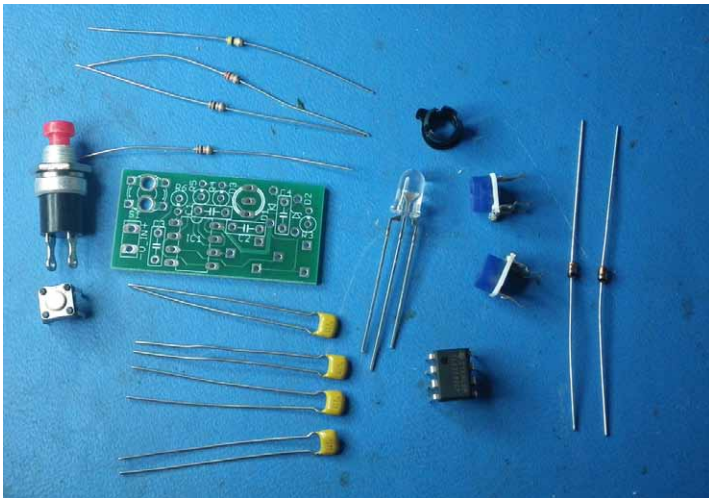
We selected the QRPKits Battery Status Indicator as the kit to build for our hands-on construction evening June 11, 2014. It is inexpensive, easy to build, and the resulting device will be useful whenever depending on battery power, as we do for field day. If you have never built a kit before, or want to refresh your skills, or just think it will be fun, make sure you order a kit on, or before the May meeting. The kits will be \$20 each including shipping and printed manuals.

The Battery Status Indicator indicator can be adjusted for batteries between 4.5 and 16 volts. A LED shows the battery voltage in relation to 3 setpoints. Above the upper setpoint is adjusted to show a still useful battery. Below the lower setpoint shows an exhausted battery. Between the two setpoints is a warning zone. It works well with 7.2v battery packs, 9.6v battery packs, 12v gell cell batteries, etc.

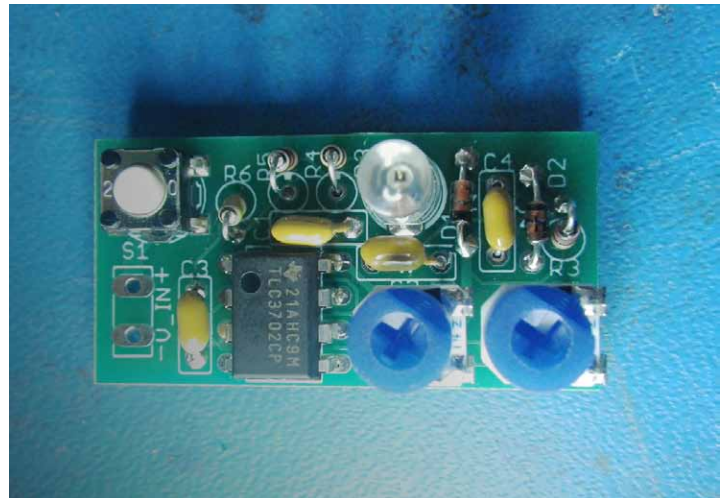
There are several assembly options. The kit can be assembled as a stand alone monitor sitting on top of a battery. It can also be assembled for installation in another piece of equipment, like a battery operated radio. In addition, it can be setup so a button push is needed to display the status, drawing current only when displaying, or for continuous display at the cost of up to 27 milliamperes of current draw.

The photographs show the Battery Status Indicator during construction and in use.

73, Bill - AE6JV



Kit Contents



Completed Kit



Battery Status Indicator In Use on a Small Gel Cell

WVARA Net Check-Ins (W6PIY)						
Each Tuesday at 8:30 PM						
All Repeaters Linked Together During Net						
Call Sign	Name	03/11/14	03/18/14	03/25/14	04/01/14	04/08/14
AA6RB	Roy				X	
AB6XS	Kevin		X	X		X
AE6JV	Bill	X			X	X
AF6AE	Bill	X	X		X	X
AG6HE	Dennis					X
K6BRF	Bert	X	X	X	X	
K6QFO	Mike			X		X
KD6VOR	Marv	X				
KE6BCS	Paul	X				
KF6EMB	Svend	X	X	X		X
KF6OTD	Gwen					X
KI6BCU	John	X				
KJ6CQJ	Dean	X	X	X	X	
KJ6GMO	Sue	X	X	X	X	
KK6HAY	Nickolas			X		
KK6VF	Kevin	NET	NET	NET	NET	NET
KK6XH	Dave			X		
KS6PD	Steve			X		
NU6P	John				X	
W6ESL	Tom	X	X	X		
W6HOC	Howard	X	X		X	X
W6PK	Phil		X	X		
WA6QYS	Lou					X
WB6KHP	Dave	X	X	X	X	X
TOTAL		13	11	13	10	11

DeAnza Flea Market Update

The DeAnza Flea Market is this Saturday, April 12, and WVARA is in charge of doughnut sales. Thank you to all how have volunteered to make this fund raiser a success. As you can see in the table below, we are more than 80% of the way in getting enough volunteers. If you haven't already signed up to help, please contact me and indicate which of the time slots highlighted in yellow work best for you.

Jim, K6EI, k6ei at earthlink dot net

Load the van/truck	Buy sodas etc.	Fee Collecting @ Entrance	Pick Up Doughnuts	Set-up	Doughnut / Coffee sales		Teardown	Site Clean-Up	Offload van/truck
5-5:30pm Friday	Friday evening	Saturday morning	5am Saturday	5:30-6am	6-9am	9-noon	noon - 12:30	12:30-1:30pm	12:30-1pm
Red Cross Bldg, First St. San Jose	Costco	DeAnza College		DeAnza College	DeAnza College	DeAnza College	DeAnza College	DeAnza College	Red Cross Bldg, First St. San Jose
1 George Williams	1 Kevin Smith	1 ASVARO rep 2:00-6:30am	1 Lou Steirer	1 Roy Beck	1 Roy Beck	1 Dennis Lyden	1 Roy Beck	1 Ed Fong	1 George Williams
2 Jim Peterson	2 Svend Jensen	2 Jon Kelley 4:20-6:30am		2 Mike Gitschel	2 Mike Gitschel	2 Svend Jensen	2 Svend Jensen	2 Jim Peterson	2 Jim Peterson
3 Svend Jensen		3 Jim Peterson 5:30-9am		3 Bill Frantz	3 Scott Emery	3 Jim Peterson	3 Jim Peterson		3 Svend Jensen
		4 Bill Frantz 6:30-9am		4 Svend Jensen		4	4		
				5 Scott Emery		5	5		
				6					

Picnic at Baylands - August 16

It's official: We've reserved Pickleweed (next to the remote-controlled aircraft)
for our WVARA Picnic/BBQ on August 16.

Jim, K6EI

Morse Musings

If you exchange the dits and the dahs in Morse numbers, the result
is also a number. The difference between the two numbers is five.

Found and contributed by Bill AE6JV

Items For Sale By George, N6NKT:

Hy-Gain TH-7DX, 7 Element, Tri-Band, 10/15/20M \$300

Manual available at <http://www.hy-gain.com/support.php?productid=TH-7DX>
Down from Palo Alto ARC office, disassembled and located in Cupertino

KLM KT-34, 4 Element, Tri-Band, 10/15/20M \$200

Boonton 92EA RF Voltmeter \$200

Contact George Williams, N6NKT, n6nkt at yahoo dot com

Send Buy and Sell information to: het_editor at wvara dot org

2014 West Valley Amateur Radio Association Board

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See You At The Meeting!